

Amendments To The Claims:

Please amend the claims as shown.

1. – 9. (canceled)

10. (new) An apparatus for removing a corroded region from a turbine component, comprising:

a vessel sized and configured to containing an electrolyte that the component;
an electrode arranged in the electrolyte and electrically connected to the component;
an electrical current pulse generator electrically connected between electrode and component, the electrical current pulse generator generating current pulses; and
an ultrasound probe arranged in the vessel and within the electrolyte.

11. (new) The apparatus as claimed in claim 10, wherein the corroded region is a coated region.

12. (new) The apparatus as claimed in claim 10, wherein a positive or a negative potential is applied to the component to generate a base current or base voltage.

13. (new) A process for removing a coating from a surface region of a component, arranging the component and an electrode in an electrolyte;
electrically connecting the component, the electrode, and a current generator;
generating a pulsed current or pulsed voltage by the current generator;
forming a sequence of current/voltage pulses by a plurality of different blocks with a block having a current pulse; and
combining a plurality of current/voltage pulses in the sequence the electrolytic coating removal.

14. (new) The process as claimed in claim 13, wherein a positive or a negative potential is applied to the component to generate a base current or base voltage.

15. (new) The process as claimed in claim 13, wherein an ultrasound probe is placed in the electrolyte.

16. (new) The process as claimed in claim 13, wherein a positive and a negative current/voltage pulses are used for the electrolytic coating removal.

17. (new) The process as claimed in claim 13, wherein a block is defined by a plurality of current pulses, pulse duration, pulse interval, current level, and pulse shape.

18. (new) The process as claimed in claim 13, wherein a block is matched to a constituent of an alloy to be removed in order to boost the removal of the constituent of the alloy.

19. (new) The process as claimed in claim 13, wherein the coating removed is an of MCrAlY, where M is an element selected from the group consisting of iron, cobalt or nickel.

20. (new) The process as claimed in claim 13, wherein a base current is superimposed on the current pulses and the intervals.

21. (new) The process as claimed in claim 13, wherein a base current is superimposed on the current pulses or the intervals.

22. (new) The process as claimed in claim 13, wherein the current voltage pulse is a square wave shape pulse.

23. (new) The process as claimed in claim 13, wherein the current current pulse is a square wave shape pulse.

24. (new) The process as claimed in claim 13, wherein the pulse times range from 1 to 10 milliseconds.

25. (new) The process as claimed in claim 13, wherein a low base current during the

pulse sequences and during the intervals is used.

26. (new) The process as claimed in claim 13, wherein the plurality of current/voltage pulses are combined repeatedly.